202220* 6th0800T

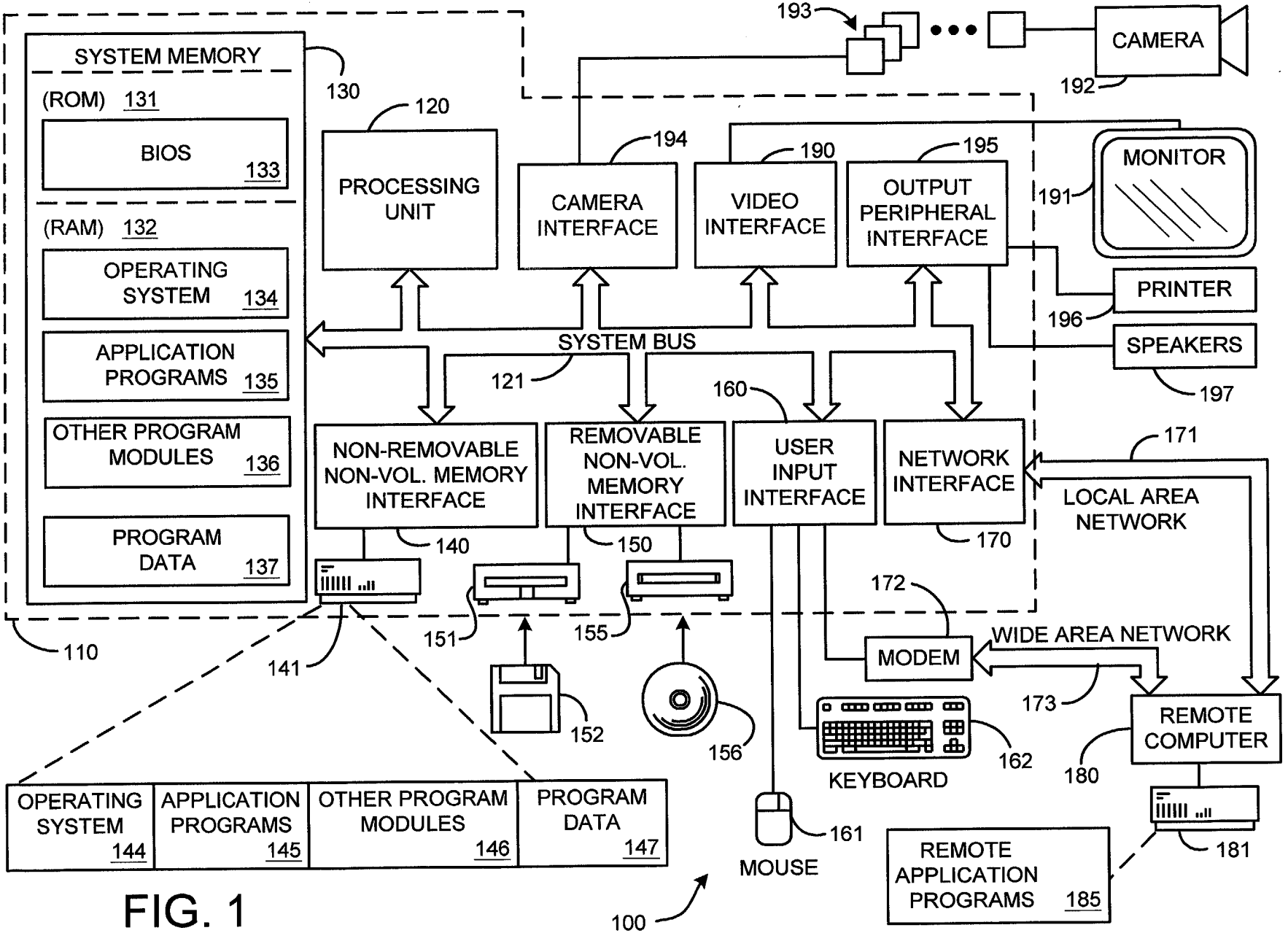

FIG. 1

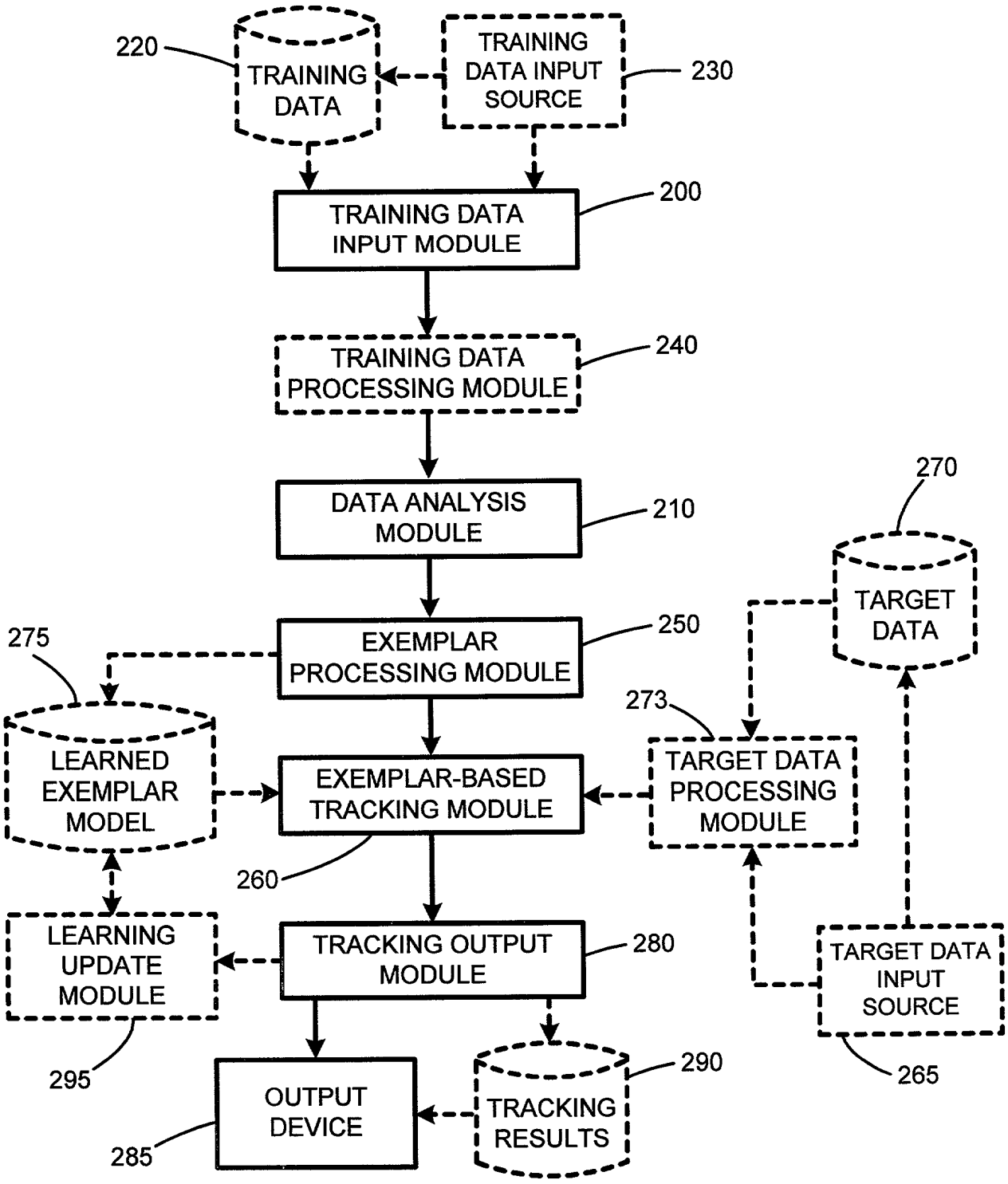
220
TRAINING DATA
TRAINING DATA INPUT SOURCE
230
TRAINING DATA INPUT MODULE
200
TRAINING DATA PROCESSING MODULE
240
DATA ANALYSIS MODULE
210
270
TARGET DATA
275
EXEMPLAR PROCESSING MODULE
250
273
LEARNED EXEMPLAR MODEL
EXEMPLAR-BASED TRACKING MODULE
TARGET DATA PROCESSING MODULE
260
LEARNING UPDATE MODULE
TRACKING OUTPUT MODULE
280
TARGET DATA INPUT SOURCE
295
265
OUTPUT DEVICE
290
TRACKING RESULTS
285

FIG. 2

20080449 - 092902

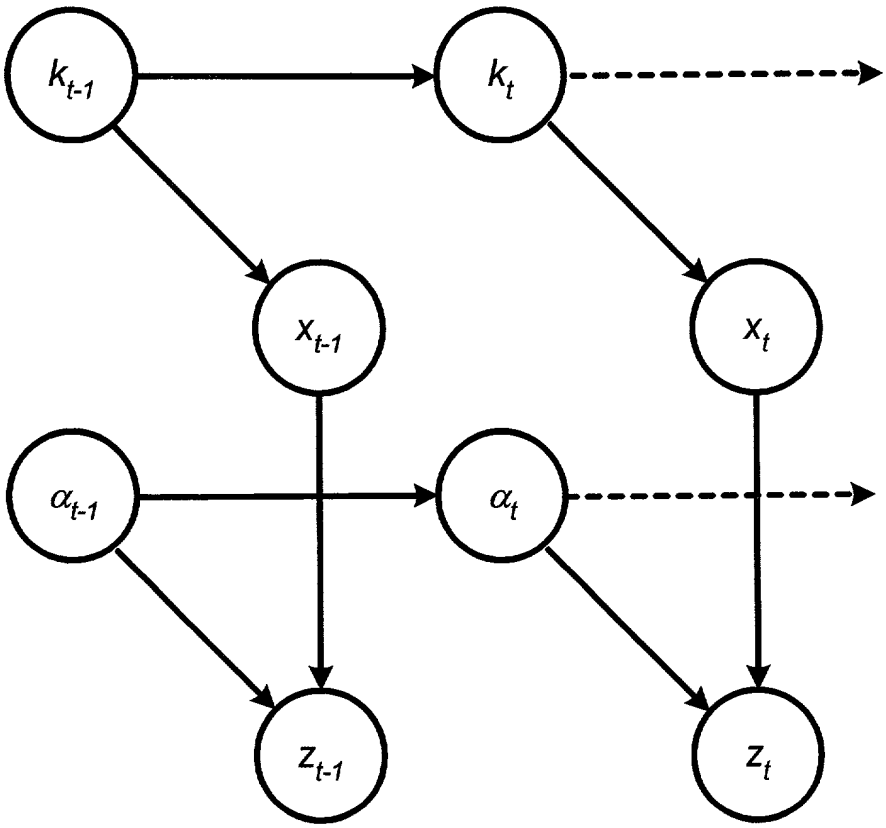

FIG. 3

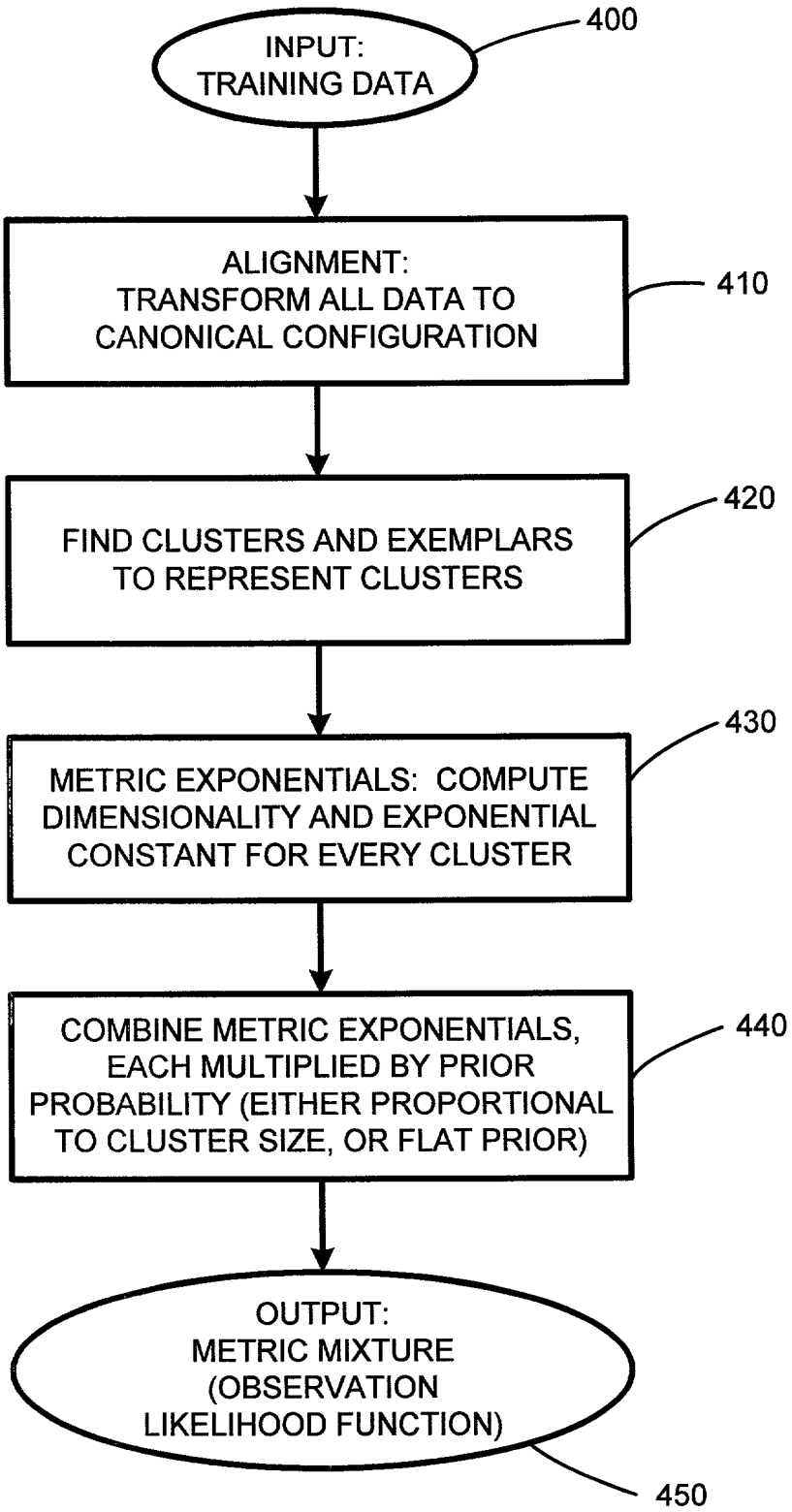

FIG. 4

1008045 - 0250

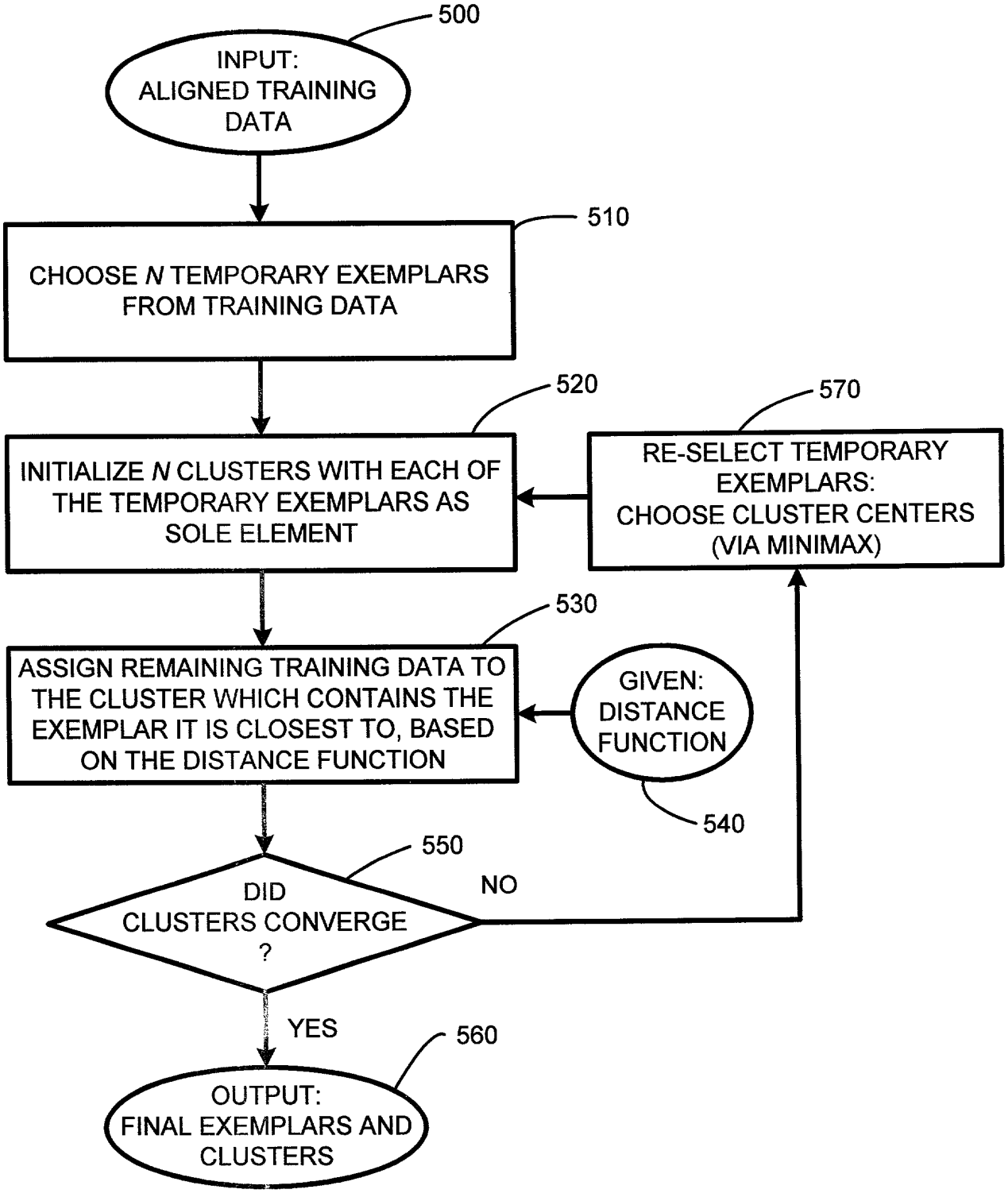
500
INPUT:
ALIGNED TRAINING
DATA
510
CHOOSE N TEMPORARY EXEMPLARS
FROM TRAINING DATA
520
INITIALIZE N CLUSTERS WITH EACH OF
THE TEMPORARY EXEMPLARS AS
SOLE ELEMENT
570
RE-SELECT TEMPORARY
EXEMPLARS:
CHOOSE CLUSTER CENTERS
(VIA MINIMAX)
530
ASSIGN REMAINING TRAINING DATA TO
THE CLUSTER WHICH CONTAINS THE
EXEMPLAR IT IS CLOSEST TO, BASED
ON THE DISTANCE FUNCTION
GIVEN:
DISTANCE
FUNCTION
540
550
DID
CLUSTERS CONVERGE
?
NO
YES
560
OUTPUT:
FINAL EXEMPLARS AND
CLUSTERS

FIG. 5

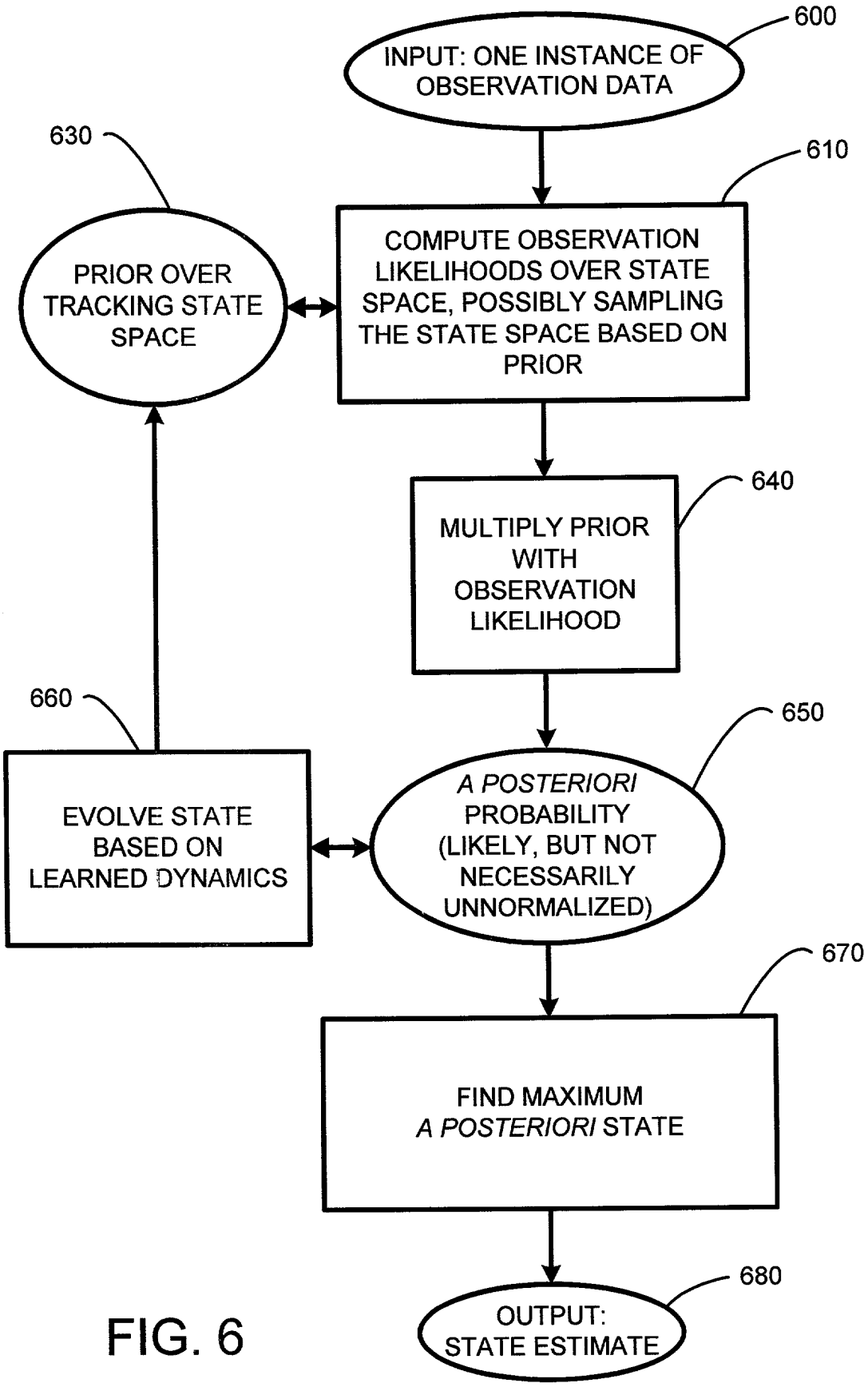

FIG. 6

1008469 - 052202

FIG. 7

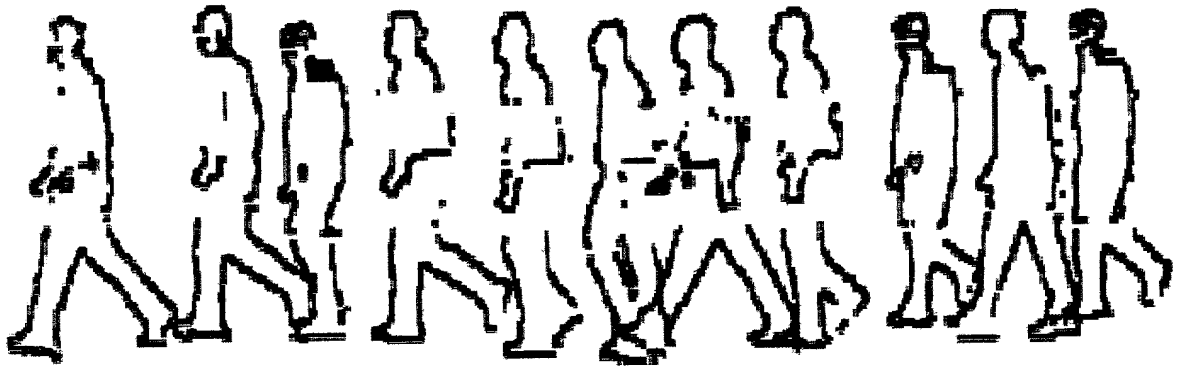

FIG. 8

US 2005/0232490 A1

FIG. 9

Object	Avg. Cluster Size	Actual DOF of Curve	d	σ
Synthesized ellipse	100	1	0.8	89.1
	100	2	1.2	93.3
	100	3	1.5	86.4
	100	4	3.6	71.9
Person contour	5	?	2.8	21.6
	10	?	4.1	14.4
	20	?	5.1	18.3
	40	?	5.0	17.9

FIG. 10

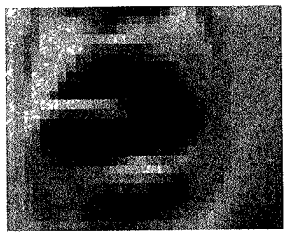

FIG. 11A

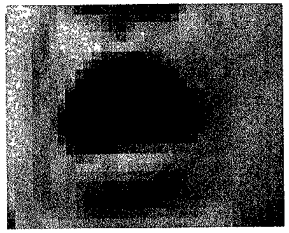

FIG. 11B

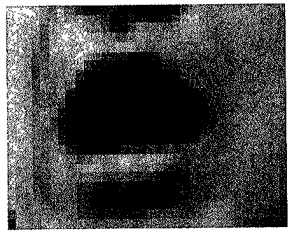

FIG. 11C

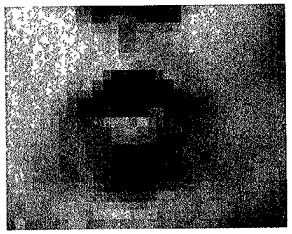

FIG. 11D

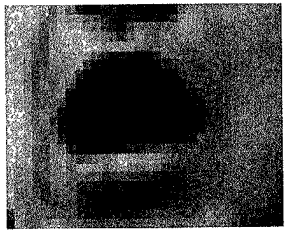

FIG. 11E

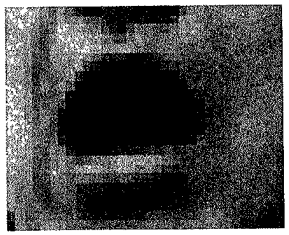

FIG. 11F

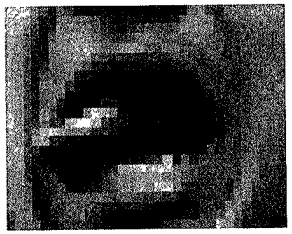

FIG. 11G

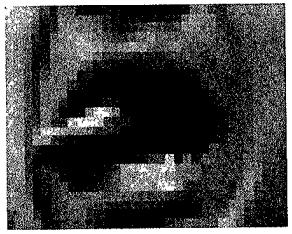

FIG. 11H